

ABSTRACT OF THE DISCLOSURE

A content addressable memory (CAM) device according to the present invention is configured with binary CAM cells capable of holding binary data "0" and "1", and is capable of being used either as a binary CAM device with the binary CAM cells being used as binary CAM cells or as a ternary CAM device with the binary CAM cells being used as ternary CAM cells capable of holding ternary data in a way in which, in each pair of two bits of the binary CAM cells, three states, "0," "1," and "X (don't care)" are assigned to four states, "00," "01," "10," and "11," expressed by two-bit data stored in the pair. A CAM device according to the present invention is provided with a CAM array including a plurality of CAM words each formed of binary CAM cells; and a binary/ternary setting section for making a setting of a case in which the binary CAM cells are used as binary CAM cells or a setting of a case in which each pair of two bits of the binary CAM cells is used as a ternary cell.